Claims:

1. A premix for an animal feed that exhibits an extended shelf-life which comprises:

a) a parasitically effective amount of at least one avermectin or milbemycin;

b) a pharmaceutically acceptable excipient comprising:

i) a pharmaceutically acceptable surfactant;

ii) a pharmaceutically acceptable wax;

iii) a pharmaceutically acceptable antioxidant;

iv) a pharmaceutically acceptable carrier vehicle wherein said vehicle is selected from the group consisting of fine corn cobs, corn meal, citrus meal, fermentation residues, ground oyster shells, wheat shorts, molasses solubles, bean mill feed, soy grits, crushed limestone and dried grains;

c) a pharmaceutically acceptable amount of a pharmaceutically acceptable stabilizer in an amount effective to adjust the pH of the premix formulation to a range of about 4 to about 6 and thereby to decrease or to prevent the acid or base catalyzed decomposition in the premix of the at least one avermectin or milbemycin compound; and

d) optionally, an effective amount of at least one insect growth regulating compound.

2. The premix according to claim 1, wherein the avermectin or milbemycin is selected from the group consisting of ivermectin, abamectin, emamectin, eprinomectin, doramectin, moxidectin, milbemycin oxime and selamectin.

3. The premix according to claim 1, wherein the insect growth regulating compound is one that mimics juvenile hormones.

4. The premix according to claim 3, wherein the insect growth regulating compound is selected from the group consisting of azadirchtin, diofenolan, fenoxycarb, hydroprene, kinoprene, methoprene, pyriproxyfen, tetrahydroazadirachtin, and 4-chloro-2-(2-chloro-2-methylpropyl)-5-(6-iodo-3-pyridylmethoxy)pyridizin-3(2H)-one.

5. The premix according to claim 1 wherein the insect growth regulating compound is one that inhibits chitin synthesis.

6. The premix according to claim 3, wherein the insect growth regulating compound is selected from the group consisting of chlorfluazuron, cyromazine, diflubenzuron, fluazuron, flucycloxuron, flufenoxuron, hexaflumuron, lufenuron, tebufenozide, teflubenzuron, and triflumuron.

7. The premix according to claim 1 wherein the insect growth regulating compound is selected from the group consisting of methoprenes, pyriproxyfens, hydrofene, cyromazine, lufenuron, 1-(2,6-difluorobenzoyl)-3-(2-fluoro-4-(trifluoromethyl)phenylurea, novaluron and a mixture thereof.

8. The premix formulation according to claim 1 wherein the pH of the premix is about 5

9. The premix formulation according to claim 1 wherein the shelf-life is extended from 6 to 24 months.

10. The premix formulation according to claim 1 wherein the shelf-life is extended from 9 to 18 months.

11. The premix formulation according to claim 1 wherein the stabilizer is selected from a group consisting of: anhydrous citric acid, glycolic acid, thioglycolic acid, gallic acid, maleic acid, and a mixture thereof.

12. The premix formulation according to claim 11 wherein the stabilizer is anhydrous citric acid.

13. The premix according to claim 1which comprises:

a) about 0.04 to about 5% (w/w) of at least one avermectin compound;

b) a pharmaceutically acceptable excipient comprising:

i) about 5 to about 15% (w/w) of a surfactant wherein said surfactant is selected from the group consisting of polyoxyl 40 hydrogenated castor oil, PEG-50 castor oil, PEG-60 corn glyceride, PEG-60 almond oil, PEG-40 palm kernel oil, and PEG-60 corn oil;

ii) about 5 to about 25% (w/w) of a wax wherein said wax is selected from the group consisting of distilled monoglycerides, glyceryl tribehenate, glyceryl trimyristate, and hydrogenated coco-glycerides;

iii) about 0.1 to about 2% (w/w) of an antioxidants wherein said antioxidants are selected from the group consisting of butylated hydroxyanisole, butylated hydroxytoluene, ascorbic acid, sodium metabisulphite, propyl gallate, sodium thiosulphate, and a mixture thereof;

iv) about 60 to about 80% (w/w) of a pharmaceutically acceptable carrier vehicle wherein said carrier vehicle is selected from the group consisting of fine ground corn cobs, crushed limestone, and dried grains;

c) a pharmaceutically acceptable amount of a pharmaceutically acceptable stabilizer in an amount effective to adjust the pH of the premix to a range of about 4 to about 6 in order to decrease the acid or base catalyzed decomposition of the at least one a vermectin or m ilbemycin compound, and;

d) optionally, a effective amount of at least one insect growth regulating compound selected from the group consisting of methopenes, pyriproxyfens, hydrofene, cyromazine, lufenuron, 1-(2,6-difluorobenzoyl)-3-(2-fluoro-4-(trifluoromethyl)phenylurea, novaluron and a mixture thereof.

14. The premix according to claim 1, the amount of the added stabilizer is between about 0.3 to about 1.2% (w/w).

15. The premix according to claim 1 wherein the amount of the added stabilizer is about 0.4 to about 0.5% (w/w).

16. The premix according to claim 1 wherein the animal feed is swine feed or horse feed.

17. A method for extending the shelf life of a premix for an animal feed comprising at least one pharmaceutically active compound wherein said pharmaceutically active compound is an avermectin or milbemycin compound said method comprises increasing the amount of the already existing stabilizer in an amount effective to adjust the pH of the premix to a range of about 4 to about 6 to decrease the acid or base catalyzed decomposition in the premix of the avermectin or milbemycin compound.

18. The method according to claim 17, wherein the stabilizer is anhydrous citric acid and the at least one avermectin or milbemycin is ivermectin.

19. The method according to claim 17, wherein the amount of stabilizer is about 0.3 to about 1.2% (w/w).

20. The method according to claim 17, wherein the amount of stabilizer is about 0.4 to about 0.5% (w/w).

21. The method according to claim 17 wherein the shelf life is extended from 6 to 24 months.

22. The method according to claim 17 wherein the shelf life is extended from 9 to 18 months.

23. The method according to claim 17, wherein the animal feed is swine feed or animal feed.